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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,107	10/27/2003	Scott A. Grace	PO-7958/MD-02-182	3074

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BAYER MATERIAL SCIENCE LLC
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EXAMINER

ASINOVSKY, OLGA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,107

Applicant(s)

GRACE ET AL.

Examiner

Olga Asinovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruchmann et al U.S. Patent 6,617,413.

Bruchmann discloses a coating composition comprising a compound having isocyanate groups wherein said compounds are present in blocked form, column 4, lines 35-40.

Blocking agents are readable in the present claims 1 and 5. The compounds having isocyanate groups can be alicyclic polyisocyanate, column 3, lines 10-25, column 4, lines 59-60, column 5, lines 5 and 29-31. The polyisocyanate represented by formula I, column 3, line 15, wherein R1 are alicyclic units and R2 is N-C(O)-R3 wherein R3 is, for example, 2-hydroxyethyl (meth)acrylate, is readable in applicants' claimed (a)

(cyclo)aliphatic polyisocyanate, see column 3, line 10-25, column 11, lines 10-17 and 27-30. The polyisocyanate groups can be blocked with pyrazoles derivative, column 4, lines 35-38. The blocking agent such said pyrazoles derivative for -N=C=O group is readable in the present claim 5. The compound of formula I can include in addition reactive diluents including esterified polyalcohols, column 8, lines 51-53, 63-66 and column 9, lines 1-17. The reactive diluents are hydroxy-functional polymer, which is readable in applicants' claimed (b) component. The coating composition is UV curable,

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column 9, line 64 and column 12, lines 8-11 and 29-31. The polyisocyanate composition is a dual-cure composition, column 12, line 11 and column 1, lines 55-66.

In addition, Bruchmann also discloses that the polyisocyanate compound represented by the formula (I) is employed preferably in the form of a mixtures comprising compound (I) and another compound having one or more isocyanate groups selected from the series consisting of urethane, urea, biuret, allophanate, uretdione and isocyanurate groups, col. 4, lines 45-62, col. 5, lines 15, 21, 41-42. The isocyanate having allophanate group can be selected in Bruchmann in claim 1 at column 20. The organic polyisocyanate containing uretdione-group or biuret-group, or isocyanurate-group, or urethane-group, col. 4, lines 49-53 can be present in the chemical formulation of a coating composition having isocyanate group in Bruchmann invention.

The difference between the present claims and Bruschmann is that Bruschmann discloses an organic polyisocyanate compound represented by the formula (I) with the statement that "the compounds (I) of the invention are in general essentially free from urethane, biuret or isocyanurate groups," col. 3. lines 9-10.

However, in light of the disclosure in Bruschmann invention at col. 4, lines 45-53, it would have been obvious to one of ordinary skill in the art to consider that the polyisocyanate in Bruchmann can be modified for making a mixture of a polyisocyanate compound (I) and at least one addition compound having isocyanate group selected from the series consisting of urethane, urea, biuret, allophanate, uretdione and

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isocyanurate groups in order to improve coating properties in contact said reactive isocyanate groups with a moist substrate such as wood, paper, foam, col. 7, lines 45-4663-67.

Reference has been considered in the first office action mailed on 02/16/2005 under 35 U.S.C. 102(e)'rejection as being anticipated by Bruchmann et al U.S. Patent 6,617,413.

Response to Arguments

3. Applicant's arguments filed 05/09/2005 have been fully considered but they are not persuasive.

4. Applicants amend claims by limiting the organic polyisocyanate wherein said organic polyisocyanate is selected from the group consisting of uretdione-containing, biuret-containing, isocyanurate-containing and urethane-group containing polyisocyanates.

The argument is that reference does not disclose the presently claimed invention referring to the reference at column 3, lines 9-15 wherein the isocyanates represented by the general formula (I) are essentially free from uretdione, biuret or isocyanurate groups. The examiner agrees. However, reference also discloses that in addition to the compounds (I), other isocyanates having uretdione groups, biuret groups and isocyanurate groups could be present, col. 4, lines 45-62, col. 5, lines 15, 21, 41-42.

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The isocyanate having allophanate group can be selected in Bruchmann in claim 1 at column 20. The claim language "comprising" in the preamble in the present claims does not limit the scope of a claim to the specified organic polyisocyanate selected from the group consisting of uretdione-containing, biuret-containing, isocyanurate-containing and urethane-group containing polyisocyanates. Reference discloses that the compounds (I) are employed preferably in the form of mixtures comprising polyisocyanate compound of formula (I) and another compound having isocyanate group selected from the series consisting of urethane, urea, biuret, allophanate, uretdione and isocyanurate groups, col. 4, lines 44-53. Therefore, it would have been obvious to one of ordinary skill in the art to consider that the polyisocyanate in Bruchmann is a mixture of a polyisocyanate compound (I) and at least one additional compound having isocyanate group selected from the series consisting of urethane, urea, biuret, allophanate, uretdione and isocyanurate groups, col. 4, lines 44-53, because said additional reactive isocyanate group has a benefit to react with moist substrates and to enhance a stability of the obtained coating composition, col. 7, lines 63-67 and col. 8, lines 1-3.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O. A

June 28, 2005

Olga Asinovsky
Examiner
Art Unit 1711


James J. Seidle
Supervisory Patent Examiner
Technology Center 1700